

# Work Order ID 127875

December-17-14 1:58:36 PM

**\*127875\***

Page 1

Item ID: D3672-3 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Washer, Phenolic **500 CD 15/06**  
 Start Date: 12/17/14 Start Qty: 250.00 **\*250\*** Cust Item ID:  
 Required Date: 12/17/14 Req'd Qty: 250.00 **\*250\*** Customer:  
 Reference:

Approvals: Process Plan: MLJ Date: 14-12-23 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                                  | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|-----------------------------------------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| <b>Draw Nbr</b>                | <b>Revision Nbr</b>                                       |                      |         |        |              |               |               |                  |                |
| D3672                          | Rev C                                                     |                      |         |        |              |               |               |                  |                |
| 100                            | PURCHASING                                                | 0.00                 |         |        |              |               |               |                  |                |
| <b>*100*</b>                   |                                                           |                      |         |        |              |               |               |                  |                |
| Purchasing                     | Memo                                                      | 0.00                 |         |        |              |               |               |                  |                |
| Purchasing                     | Issue P/O: <u>26938</u>                                   |                      |         |        |              |               |               |                  |                |
|                                | Purchase Part Number: MM .500 OD X .267 ID X.031 +/- .002 |                      |         |        |              |               |               |                  |                |
|                                | Supplier: HASKINS INDUSTRIAL                              |                      |         |        |              |               |               |                  |                |
|                                | Certificate of conformity is required                     |                      |         |        |              |               |               |                  |                |
| 110                            | Receive & Inspect for Damage & Mat'l Certs                | 0.00                 |         |        |              |               |               |                  |                |
| <b>*110*</b>                   |                                                           |                      |         |        |              |               |               |                  |                |
| Packaging                      | Memo                                                      | 0.00                 |         |        |              |               |               |                  |                |
| Packaging                      | Ensure certificate of conformity is attached              |                      |         |        |              |               |               |                  |                |
| 120                            | QC6- Inspect dimensions to drawing                        | 0.00                 |         |        |              |               |               |                  |                |
| <b>*120*</b>                   |                                                           |                      |         |        |              |               |               |                  |                |
| QC                             | Memo                                                      | 0.00                 |         |        |              |               |               |                  |                |
| Quality Control                |                                                           |                      |         |        |              |               |               |                  |                |

CD 15/01/06 500 250

500X SP 15-01-7

500 DAS 38 9-89

IAN 07 2015

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Work Order ID 127875**

December-17-14 1:58:36 PM

**\*127875\***

Page 2

Item ID: D3672-3

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Washer, Phenolic

Stop

**\*NS2\***

Start Date: 12/17/14 Start Qty: 250.00

**\*250\***

Cust Item ID:

Required Date: 12/17/14 Req'd Qty: 250.00

**\*250\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130

Identify as per dwg & Stock Location: STOSS 0.00**\*130\***

Packaging

Memo

0.00

Packaging

500

JAN 07 2015

DAS

06

9-89

140

QC21- Final Inspection - Work Order Release

0.00

**\*140\***

QC

Memo

0.00

Quality Control

MLJ 1501-081518

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width:100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
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| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

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| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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# Picklist Print

December-17-14 1:58:35 PM

Page 1

Work Order ID: 127875

**\*127875\***

Parent Item: D3672-3

**\*D3672-3\***

Parent Item Name: Washer, Phenolic

Start Date: 12/17/14

Required Date: 12/17/14

Start Qty: 250.00

Required Qty: 250.00

Comments: IPP Rev:A New Issue 07-09-09 JLM Verified By:EC  
IPP Rev:B ECN 1056 07-11-13 DD

| Component Item ID/<br>Item Name         | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit    | Total<br>Qty                 | Qty<br>Issued | Date<br>Issued | Status                                 |
|-----------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|----------------|------------------------------|---------------|----------------|----------------------------------------|
| D3672-3P<br><b>*D3672-3P*</b><br>Washer |                        | Purchased     | No          |                     |                  | 110             | Each               | 0.0000         | 1<br><b>**</b> | <del>250</del><br><b>500</b> |               |                | <b>DAS</b><br><b>28</b><br><b>9-89</b> |

500x 15-01-7

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

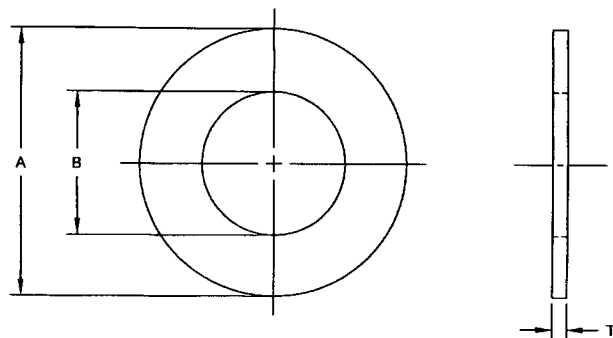
|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|----------------------------------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design <input type="checkbox"/>        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data <input type="checkbox"/>      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre <input type="checkbox"/>  |      |      |     |                                                     |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup <input type="checkbox"/>  |      |      |     |                                                     |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |                                                     |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport <input type="checkbox"/>     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |                                                     |                   |                    |             |              |              |

**FAULT CATEGORY**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# SPECIFICATION CONTROL DRAWING



**D3672-X PHENOLIC WASHER**

| Dart P/N | A (IN) | B (IN) | T (IN) | SUPPLIER P/N                                               | REPLACES   |
|----------|--------|--------|--------|------------------------------------------------------------|------------|
| D3672-1  | 0.437  | 0.210  | 0.031  | MM .437OD x .210ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H3L |
| D3672-3  | 0.500  | 0.267  | 0.031  | MM .500OD x .267ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H4L |
| D3672-5  | 0.562  | 0.326  | 0.062  | MM .562OD x .326ID x .062 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H5  |
| D3672-7  | 0.562  | 0.328  | 0.031  | MM .562OD x .328ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H5L |
| D3672-9  | 0.625  | 0.390  | 0.031  | MM .625OD x .390ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H6L |
| D3672-11 | 0.750  | 0.453  | 0.031  | MM .750OD x .453ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H7L |
| D3672-13 | 0.875  | 0.515  | 0.031  | MM .875OD x .515ID x .031 +/- .002<br>PHENOLIC FLAT WASHER | NAS1515H8L |



## NOTES:

- 1) MATERIAL: PHENOLIC. PURCHASE HASKINS INDUSTRIAL INC. P/N PER TABLE (IN QUANTITIES OF 1000)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

13 COPY  
127875 MCT  
14-12-23

RELEASED  
2009-12-14

|            |                                       |                                                                                                                                                                                                                                                                          |              |
|------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| C          | REDRAW, ADD -13 (ZN A8-1), PAR 09-038 | CP                                                                                                                                                                                                                                                                       | 09.11.04     |
| B          | ADD -5/-7/-9/-11                      | DC                                                                                                                                                                                                                                                                       | 07.10.09     |
| A          | NEW ISSUE                             | DC                                                                                                                                                                                                                                                                       | 07.08.28     |
| REV.       | DESCRIPTION                           | BY                                                                                                                                                                                                                                                                       | DATE         |
| DESIGN     | DC                                    | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA                                                                                                                                                                                                                 |              |
| DRAWN      | qp                                    |                                                                                                                                                                                                                                                                          |              |
| CHECKED    | JP                                    | DRAWING NO.                                                                                                                                                                                                                                                              | REV. C       |
| MFG. APPR. | JP                                    | D3672                                                                                                                                                                                                                                                                    | SHEET 1 OF 1 |
| APPROVED   | JP                                    | TITLE                                                                                                                                                                                                                                                                    | SCALE        |
| DE APPR.   | JP                                    | PHENOLIC WASHER                                                                                                                                                                                                                                                          | NTS          |
| DATE       | 09.11.04                              | COPYRIGHT © 2007 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |              |



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO26938**

Purchase Order Date 1/6/2015

PO Print Date 1/6/2015

Page Number 1 of 2

**Order From :**

VC-HAS001

**Ship To :** DART AEROSPACE LTD

HASKINS INDUSTRIAL  
5-52 ANTARES DRIVE  
NEPEAN, ON K2E 7Z1  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**REUSED**

**Contact Name**

**Vendor Phone** 613 723 8800

**Ship To Contact**

**Ship To Phone**

**Ship Via:** Dicom

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

FCA - (Free Carrier)

| Line Nbr           | Reference<br>Vendor Part Number<br>Line Comments<br>Delivery Comments | Description/<br>Mfg ID | Req Date/<br>Taxable<br>Promise Date | CD | Req Qty/<br>Unit of<br>Measure | PO Unit Price | Extended<br>Price |
|--------------------|-----------------------------------------------------------------------|------------------------|--------------------------------------|----|--------------------------------|---------------|-------------------|
| 1                  | D3672-1P<br><br>AS PER DWG D3672 REV. C<br>B127322                    | Washer                 | 1/12/2015<br>Yes<br>1/12/2015        |    | 500.00<br>Each                 | \$0.32        | \$161.4           |
| <b>Line Total:</b> |                                                                       |                        |                                      |    |                                |               | <b>\$161.4</b>    |
| 2                  | D3672-3P<br><br>AS PER DWG D3672 REV. C<br>B127875                    | Washer                 | 1/1/1753<br>Yes<br>1/12/2015         |    | 500.00<br>Each                 | \$0.32        | \$161.4           |
| <b>Line Total:</b> |                                                                       |                        |                                      |    |                                |               | <b>\$161.4</b>    |

SP15-01-7

**Note:**

1/6/2015



HASKINS INDUSTRIAL INC.  
5-52 ANTARES DRIVE

\*\* PACKING SLIP \*\*

Order # 125618

NEPEAN, ONTARIO K2E 7Z1  
TEL (613)723-8800 FAX (613)723-8806

Order Date 01/06/15

Page 1

Sold To: DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY  
ON  
K6A 1K7

Ship To: DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY  
ON  
K6A 1K7

|              |           |        |                |
|--------------|-----------|--------|----------------|
| Cust Phone # | Warehouse | F.O.B. | Taken By       |
|              | OTTAWA    | DEST   | Sylvie 613-723 |

| Cust # | Customer P/O # | Required | Orig Order | Slsm | Ship Via | Terms  |
|--------|----------------|----------|------------|------|----------|--------|
| 05168  | 26938          | 01/07/15 | 1256183.00 | PL   | DICOM    | NET 30 |

| Ln# | Bin #  | Order UM | Ship  | B/O Product | Description                            |
|-----|--------|----------|-------|-------------|----------------------------------------|
| 1   | CAB810 | 500 EA   | 500 ✓ | MMS-D3672-1 | .437 X .210 X .031 +/- .002 WASHER, PF |
| 2   | CAB810 | 500 EA   | 500   | MMS-D3672-3 | .500 X .267 X .031 +/- .002 WASHER, PF |

88 15-01-7

PLEASE NOTE:

1. NO RETURNS WITHOUT PRIOR AUTHORIZATION
  2. ALL SHORTAGE CLAIMS MUST BE WITHIN 10 DAYS
  3. BO CODE: BO = QTY NOT SHIPPED IS BACK-ORDERED
- CL= QTY NOT SHIPPED WAS CANCELLED  
SC= ITEM CONSIDERED COMPLETE - NO B/O CREATED

FILL *J* PACK *AD* DATE 01/06/15  
Printed on 2015-01-06 at 13:14